

## **Changes to 01/30/04 Draft NWSI 10-1703, Valid Time Event Code (VTEC) - compared with the draft dated 12/2002**

We have extensively revised and enlarged the draft 10-1703 NWSI, dated December 2002, including incorporating the NWS and Partners' comments that were received early in 2003, and more recent comments from the OS service branches and the OST developers, and suggestions from our partners. Also, we've done much rewording for added clarity.

A few highlights:

- Added interpretations to all examples - see item a
- A fixed indicator (k) now begins the VTEC string - see item d.
- Expanded explanation of UPG (Upgraded), CAN (Cancelled), and EXP (Expired) action codes. TES (Test) code eliminated. - see item e
- Expanded explanation of ETN - see item f
- Added Watch Outline Update (WOU) product - see item j
- Expanded Watch County Notification (WCN) product - see item k
- Wholly expanded marine products sections with many more examples- no VTEC in marine for tropical cyclones - see items m, n, o
- Added new "Tropical Cyclone Product for VTEC (TCV)" - see item q
- Greatly expanded examples in Appendix C - see item w

Following are the specific substantive changes, as they occur in order of appearance in the instruction. We have updated the Table of Contents to reflect the title changes within the instruction. The section numbers below refer to the updated instruction; where noted, the section numbers have been changed from the old (12/02) version.

- a Added interpretation to all examples, including those that illustrate particular points in various sections.
- b Section 1.4 - Event versus Segment versus Product. Added definition of "Segment" between "Event" and "Product." Added note to product definition concerning product title versus event names. Note that we included the same additions to the definitions in NWSI's 10-1701 and 10-1702.
- c Section 2 - Primary (P)-VTEC Format. Broke out formats for segmented and non-segmented products.
- d Section 2.1 - Generic Structure of P-VTEC Elements. A fixed indicator (k) now starts the code string, which is specifically defined (O - Operational, T - Test, E - Experimental products, X - Experimental VTEC in an Operational Product) in new Section 2.2.1. The rest of the subsections are renumbered, accordingly.

The Date/Time Group key is revised for clarity, and includes the subscript changes, as does Section 2.2.7. Note: subscripts are not used in actual code strings in products.

- e Section 2.2.2 - aaa (Action). We have extensively revised the action codes UPG (UPGRADED), CAN (CANCELLED), and EXP (EXPIRED), providing more detailed explanations of their use. ROU (ROUTINE) is also somewhat enhanced. The TES (TEST) action code is eliminated and also removed from Appendix A listing. The COR action code will likely be enhanced in a future AWIPS build.
- f Section 2.2.6 - ##### (Event Tracking Number ETN). We have expanded this section to include further explanations for clarity.
- g Section 2.2.7 - Event Beginning and Ending Date/Time Groups. We have revised and expanded this section to include further explanation, for clarity.
- h Section 3.1 - Event Significance Level Change or Replacement in Products. Expanded opening paragraph and especially subsection 3.1a with further explanation.
- i Section 3.2 - Severe Thunderstorm/Tornado Watch products. Wholly revised.
- j (new) Section 3.2.1 - Watch Outline Update Product (WOU). Issued by SPC, this section provides a complete example.
- k (new) Section 3.2.2 - WFO Watch County Notification Product (WCN). This section replaces example of WCN in old version of instruction, and provides two complete examples, and explanation of this product and its relationship to SPC's WOU.
- l Section 3.3 - Severe Weather Statement product (SVS). This section provides explanation of the SVS role in providing followup information on TOR/SVR's.
- m (new) Section 3.4 - Marine and Coastal Weather Products. Wholly revised and expanded section. This section provides examples of ten marine products (only 4 in old version).
- n (new) Section 3.4.1 - Marine Forecast Products. A generic explanation of use of VTEC in routine forecasts, with an example for a Nearshore Forecast.
- o (new) Section 3.4.2 - Coastal and Marine Product Examples. This subsection provides examples for the following marine products (or further explanations) that use VTEC:
  - a. Coastal Waters Forecast (CWF) Product
  - b. Coastal Flood Warning (CFW) Product
  - c. High Surf Advisory (MWS)
  - d. Lakeshore Flood Warning (CFW) Product
  - e. Open Lake Forecast (GLF) Product
  - f. Offshore Waters Forecast (OFF) Product
  - g. Unscheduled Update of a Marine Forecast product (Nearshore Forecast - NSH)
  - h. Coastal Waters Forecast (CWF) Product with Tornado Watch Issued by the Storm Prediction Center (SPC)

- p (new) Section 3.4.3 - VTEC Coding for Tropical Cyclones. No marine products will include Tropical Cyclone VTEC. (See new Section 3.5 for new tropical cyclone VTEC product.)
- q (new) Section 3.5 - Tropical Cyclone Product for VTEC (TCV). This new product (proposed experimental phase 2005, operational in 2006) will be the only tropical cyclone product to use VTEC.
- r Section 4 - Hydrologic H-VTEC Format. Expanded with explanation for use of FFW and FLW.
- s Section 4.1 - Generic Structure of H-VTEC Elements. Similar to the P-VTEC sections, note that B (beginning), C (crest), and E (ending) subscripts are now attached to the respective fixed "Z" indicators in the generic string, no longer to the beginning, crest, and ending dd's. The Date/Time Group key is revised for clarity, and includes the subscript changes, as does Section 4.2.3. Note that the subscripts are not used in actual code strings in products.
- t Sections 4.2.1 - s (Flood Severity) and 4.2.4 - fr (Flood Record Status). Both subsections now note that these elements do not apply to Flash Flood events. Also, an example is added to 4.2.4.
- u Appendix A - Listing of P-VTEC Elements. TES - TEST is eliminated from ACTIONS column.
- Under PHENOMENA columns, DENSE added to SMOKE, and added new Red Flag Warning.
- v Appendix B - Listing of H-VTEC Elements. In the Flood Severity column, a "0" (zero) is added, for Flash Flood and Areal Flood Warnings. In the Flood Record Status column, "OO" (two Oh's) are added for Flash Flood and Areal Flood Warnings.
- w Appendix C - Examples and Interpretations. Widely expanded with numerous additional examples and beefier interpretations, where needed. The Appendix is in two parts: Section 1 for P-VTEC and Section 2 for H-VTEC.
- Section 1, most of the expansion is in subsection d., where the old version had only one example, this revised version has two extra examples, each one of which shows a sequence of examples that flows from one type of event to another within the same weather system
  - Section 2, added comprehensive interpretations to all hydro examples (the old version did not have any interpretations).